

Section 4: BMPs for Urban Contractors

Note: Now annual reporting can be submitted over the internet at <http://www.cuwcc.org/>.

These BMPs will be evaluated based on the CUWCC MOU, amended March 14, 2001. Under certain circumstances, the generally applicable practices may not be appropriate for contractor implementation. Contractors will implement each BMP unless the contractor provides adequate documentation for an exemption. BMP Number 4, Metering with Commodity Rates for All New Connections and Retrofit of Existing Connections, is the only BMP which is not exemptible.

For each of the BMPs, please refer to the CUWCC's MOU Exhibit 1 (BMP Definitions, Schedules, and Requirements), which is included in this document. This section lays out the requirements for implementation, coverage, and documentation. We are also requiring contractors to complete the "Connection and Water Use Data" sheet and the "CUWCC BMP Implementation Plan" projection sheets for projected expenditure budget and staff hours for each BMP. This information can be found on the CD in the *Planner* and Guidebook.

Wholesalers must insure that their subcontractor's have adequate Plans found to meet the Criteria. Wholesalers may include subcontractors in a single Plan or require each retailer to prepare separate Plans. If retailers prepare their own Plan, the wholesaler should be involved to the extent necessary to insure it is found to meet the Criteria.

The purpose of preparing a Plan is for the contractor to implement the programs developed during the planning process. Each year contractors report on actual BMP activities, budget, and staffing during the previous year. They also report on expenditures and staffing levels for the coming projected year and provide information on planned activities.

Contractors should maintain regular records of BMP implementation activities to facilitate the completion of the Annual Update. The BMP records can be tracked in a variety of ways. Some methods are: Conservation staff recording data on their time sheets, week schedules, and special budget computer codes.

The BMPs listed here are intended to reduce long-term urban demands, and to better improve water management, in an effort to maximize the limited water resources available. These BMPs are in addition to programs that may be instituted during occasional water supply shortages.

For your convenience, the CUWCCs MOU Exhibit 1 is provided below.

1. Water Survey Programs for Single-Family Residential and Multi-Family Residential Customers

Implementation

Implementation shall consist of at least the following actions:

- a. Develop and implement a strategy targeting and marketing water-use surveys to single-family residential and multi-family residential customers.
- b. Directly contact via letter or telephone not less than 20 percent of single-family residential customers and 20 percent of multi-family residential customers each reporting period.
- c. Surveys shall include indoor and outdoor components, and at minimum, shall have the following elements:

Indoor

- 1) Check for leaks, including toilets, faucets, and meter check.
- 2) Check showerhead flow rates, aerator flow rates, and offer to replace or recommend replacement, as necessary.
- 3) Check toilet flow rates and offer to install or recommend installation of displacement device or direct customer to ULFT replacement program, as necessary; replace leaking toilet flapper, as necessary

Outdoor

- 4) Check irrigation system and timers.
- 5) Review or develop customer irrigation schedule.

Recommended but not required

- 6) Measure currently landscaped area.
 - 7) Measure total irrigable area.
- d. Provide customer with evaluation results and water saving recommendations;

leave information packet with customer.

- e. Track surveys offered, surveys completed, survey results, and survey costs.

Coverage Requirements

a. Not less than 15 percent of single-family residential accounts to receive water-use surveys within 10 years of the date implementation was to commence. For the purposes of calculating coverage, 15 percent of single-family residential accounts means the number of accounts equal to 15 percent of single-family accounts in 1997 or the year the agency signed the MOU, whichever is later.

b. Not less than 15 percent of multi-family residential units to receive water-use surveys within 10 years of the date implementation was to commence. For the purposes of calculating coverage, 15 percent of multi-family residential units means the number of units equal to 15 percent of multi-family units in 1997 or the year the agency signed the MOU, whichever is later.

Requirements for Documenting BMP Implementation

- a. Number of single-family residential accounts in service area.
- b. Number of multi-family residential accounts in service area.
- c. Number of single-family residential surveys offered during reporting period.
- d. Number of single-family residential surveys completed during reporting period.
- e. Number of multi-family residential surveys offered during reporting period.
- f. Number of multi-family residential surveys completed during reporting period.

2. Residential Plumbing Retrofit

Implementation

Implementation shall consist of at least the following actions:

a. Identify single-family and multi-family residences constructed prior to 1992. Develop a targeting and marketing strategy to distribute or directly install high-quality, low-flow showerheads (rated 2.5 gpm or less), toilet displacement devices (as needed), toilet flappers (as needed), and faucet aerators (rated 2.2 gpm or less) as practical to residences requiring them.

b. Maintain distribution and/or direct installation programs so that devices are distributed to not less than 10 percent of single-family connections and multi-family units each reporting period, or require through enforceable ordinance the replacement of high-flow

showerheads and other water using fixtures with their low-flow counterparts, until it can be demonstrated in accordance with Section E of this Exhibit that 75 percent of single-family residences and 75 percent of multi-family units are fitted with high-quality, low-flow showerheads.

c. Track the type and number of retrofits completed, devices distributed, and program costs.

Coverage Requirements

a. Plumbing device distribution and installation programs to be maintained at a level sufficient to distribute high-quality, low-flow showerheads to not less than 10 percent of single-family residences and 10 percent of multi-family units constructed prior to 1992 each reporting period, or the enactment of an enforceable ordinance requiring the replacement of high-flow showerheads and other water use fixtures with their low-flow counterparts.

b. Plumbing device distribution and installation programs to be operated until it can be demonstrated in accordance with Section E of this Exhibit that 75 percent of single-family residences and 75 percent of multi-family units are fitted with high-quality, low-flow showerheads.

Requirements for Documenting BMP Implementation

a. The target population of pre-1992 single-family residences and multi-family units to be provided showerheads and other water saving devices.

b. The number of showerhead retrofit kits distributed during previous reporting period.

c. The number of device retrofits completed during the previous reporting period.

d. The estimated percentage of pre-1992 single-family residences and multi-family units in service area fitted with low-flow showerheads.

3. *System Water Audits, Leak Detection, and Repair*

Implementation

Implementation shall consist of at least the following actions:

- a. Annually complete a prescreening system audit to determine the need for a full-scale system audit. The prescreening system audit shall be calculated as follows:
 - 1) Determine metered sales.
 - 2) Determine other system verifiable uses.
 - 3) Determine total supply into the system.
 - 4) Divide metered sales plus other verifiable uses by total supply into the system. If this quantity is less than 0.9, a full-scale system audit is indicated.
- b. When indicated, agencies shall complete water audits of their distribution systems using methodology consistent with that described in AWWA's Water Audit and Leak Detection Guidebook.
- c. Agencies shall advise customers whenever it appears possible that leaks exist on the customer's side of the meter; perform distribution system leak detection when warranted and cost effective; and repair leaks when found.

Coverage Requirements

- a. Agency shall maintain an active distribution system auditing program.
- b. Agency shall repair identified leaks whenever cost-effective.

Requirements for Documenting BMP Implementation

- a. Prescreening audit results and supporting documentation.
- b. Maintain in-house records of audit results or the completed AWWA audit worksheets for each completed audit period.

4. Metering With Commodity Rates for All New Connections and Retrofit of Existing Connections

Implementation

Implementation shall consist of at least the following actions:

- a. Requiring meters for all new connections and billing by volume of use.
- b. Establishing a program for retrofitting existing unmetered connections and billing by volume of use.
- c. Identifying intra- and inter-agency disincentives or barriers to retrofitting mixed-use commercial accounts with dedicated landscape meters, and conducting a feasibility study to assess the merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters.

Coverage Requirements

Hundred percent of existing unmetered accounts to be metered and billed by volume of use within 10 years of date implementation was to commence.

Requirements for Documenting BMP Implementation

- a. Confirmation that all new connections are metered and are being billed by volume of use.
- b. Number of unmetered accounts in the service area. For the purposes of evaluation, this shall be defined as the baseline meter retrofit target and shall be used to calculate the agency's minimum annual retrofit requirement.
- c. Number of unmetered connections retrofitted during the reporting period.
- d. Number of CII accounts with mixed-use meters.
- e. Number of CII accounts with mixed-use meters retrofitted with dedicated irrigation meters during reporting period.

5. Large Landscape Conservation Programs and Incentives

Implementation

Implementation shall consist of at least the following actions:

Customer Support, Education, and Assistance

Agencies shall provide non-residential customers with support and incentives to improve their landscape water-use efficiency. This support shall include, but not be limited to, the following:

Accounts with Dedicated Irrigation Meters

- a. Identify accounts with dedicated irrigation meters and assign ETo-based water-use budgets equal to no more than 100 percent of reference ET per square foot of landscape area in accordance with the schedule given in Section B.
- b. Provide notices each billing cycle to accounts with water-use budgets showing the relationship between the budget and actual consumption in accordance with the schedule given in Section B; agencies may choose not to notify customers whose use is less than their water-use budget.

CII Accounts with Mixed-Use Meters or Not Metered

- a. Develop and implement a strategy targeting and marketing large landscape water-use surveys to CII accounts with mixed-use meters. Each reporting period, directly contact via letter or telephone not less than 20 percent of CII accounts with mixed-use meters and offer water-use surveys. (Note: CII surveys that include both indoor and outdoor components can be credited against coverage requirements for both BMP 5 and BMP 9.)
- b. Unmetered service areas will actively market landscape surveys to existing accounts with large landscapes or accounts with landscapes which have been determined by the purveyor not to be water efficient.
- c. Offer the following measures when cost effective:
 - 1) Landscape water-use analysis/surveys.
 - 2) Voluntary water-use budgets.
 - 3) Installation of dedicated landscape meters

4) Training (multi-lingual, where appropriate) in landscape maintenance, irrigation system maintenance, and irrigation system design.

5) Financial incentives to improve irrigation system efficiency such as loans, rebates, and grants for the purchase and/or installation of water efficient irrigation systems.

6) Follow-up water-use analyses/surveys consisting of a letter, phone call, or site visit, where appropriate.

d. Survey elements will include: Measurement of landscape area; measurement of total irrigable area; irrigation system check, and distribution uniformity analysis; review or develop irrigation schedules, as appropriate; and provision of a customer survey report and information packet.

e. Track survey offers, acceptance, findings, devices installed, savings potential, and survey cost.

New or Change of Service Accounts

Provide information on climate-appropriate landscape design, efficient irrigation equipment/management to new customers and change-of-service customer accounts.

Recommended

a. Install climate appropriate water efficient landscaping at water agency facilities, and dual metering, where appropriate.

b. Provide customer notices prior to the start of the irrigation season alerting them to check their irrigation systems and make repairs as necessary. Provide customer notices at the end of the irrigation season advising them to adjust their irrigation system timers and irrigation schedules.

Coverage Requirements

a. ETo-based water-use budgets developed for 90 percent of CII accounts with dedicated irrigation meters by the end of the second reporting period from the date implementation was to commence.

b. Not less than 20 percent of CII accounts with mixed-use meters contacted and

offered landscape water-use surveys each reporting period.

c. Irrigation water-use surveys completed for not less than 15 percent of CII accounts with mixed-use meters within 10 years of the date implementation was to commence. (Note: CII surveys that include both indoor and outdoor components can be credited against coverage requirements for both BMP 5 and BMP 9.) For the purposes of calculating coverage, 15 percent of CII accounts means the number of accounts equal to 15 percent of CII accounts with mixed-use meters in 1997 or the year the agency signed the MOU, whichever is later.

Requirements for Documenting BMP Implementation

Dedicated Landscape Irrigation Accounts

Agencies shall preserve water-use records and budgets for customers with dedicated landscape irrigation accounts for a period of not less than two reporting periods. This information may be used by the CUWCC to verify the agency's reporting on this BMP.

- a. Number of dedicated irrigation meter accounts.
- b. Number of dedicated irrigation meter accounts with water budgets.
- c. Aggregate water use for dedicated landscape accounts with budgets.
- d. Aggregate budgeted water use for dedicated landscape accounts with budgets.

Mixed-Use Accounts

- a. Number of mixed-use accounts.
- b. Number, type, and dollar value of incentives, rebates, and no, or low interest loans offered to, and received by, customers.
- c. Number of surveys offered.
- d. Number of surveys accepted.
- e. Estimated annual water savings by customers receiving surveys and implementing recommendations.

6. High-Efficiency Washing Machine Rebate Programs

Implementation

Implementation shall consist of at least the following actions:

CUWCC Actions and Responsibilities

a. Within 6 months from the adoption of this BMP, the CUWCC will develop interim estimates of reliable water savings attributable to the use of high-efficiency washing machines based on the results of the THELMA Study and other available data. Water purveyors may defer implementing this BMP until the CUWCC has adopted these interim estimates. (Note: Interim Estimate of Reliable Water Savings Adopted by the CUWCC Plenary, April 8, 1998, see Section F.)

b. Within 2 years from the adoption of this BMP, the CUWCC will complete studies quantifying reliable savings attributable to the use of high-efficiency washing machines.

c. At the end of 2 years following the adoption of this BMP, the CUWCC will appoint a committee to evaluate the effectiveness of triggering high-efficiency washing machine financial incentive programs operated by MOU signatories with programs operated by energy service providers. This committee will consist of two group one representatives, two group two representatives, and the CUWCC Administrator or Executive Director or his/her designee. This BMP will be modified by the appointed committee to require agencies to implement financial incentive programs for high-efficiency washing machines whenever cost-effective and regardless of the absence of a program operated by an energy service provider, if the committee concludes from available evidence the following:

1) CUWCC has verified that significant water savings are available from high-efficiency washing machines.

2) There is widespread product availability.

3) Financial incentive programs offered by energy service providers in California have either not materialized, been largely discontinued, or have significantly scaled back.

Water Purveyor Responsibilities

a. In conjunction with the CUWCC, support local, State, and Federal legislation to improve efficiency standards for washing machines.

b. If an energy service provider or waste water utility within the service territory

is offering a financial incentive for the purchase of high-efficiency washing machines, then the water agency shall also offer a cost-effective financial incentive based on the marginal benefits of the water savings. Incentive levels shall be calculated by using methods found in A Guide to Customer Incentives for Water Conservation prepared by Barakat and Chamberlain for California urban water agencies, the CUWCC, and the U.S. Environmental Protection Agency, February 1994. A water purveyor is not required to implement a financial incentive program, if the maximum cost-effective rebate is less than \$50.

Coverage Requirements

Cost-effective customer incentive for the purchase of high-efficiency washing machine offered, if incentives are being offered by local energy service providers or waste water utility.

Requirements for Documenting BMP Implementation

- a. Customer incentives to purchase high-efficiency washing machines being offered by local energy service providers, if any.
- b. Customer incentives to purchase high-efficiency washing machines being offered by agency, if any.

7. Public Information Programs

Implementation

Implementation shall consist of at least the following actions:

- a. Implement a public information program to promote water conservation and water conservation related benefits.
- b. Program should include, but is not limited to, providing speakers to employees, community groups and the media; using paid and public service advertising; using bill inserts; providing information on customers' bills showing use in gallons per day for the last billing period compared to the same period the year before; providing public information to promote water conservation practices; and coordinating with other government agencies, industry groups, public interest groups, and the media.

Coverage Requirements

Agencies shall maintain an active public information program to promote and educate customers about water conservation.

Requirements for Documenting BMP Implementation

- a. Number of public speaking events relating to conservation during reporting period.
- b. Number of media events relating to conservation during reporting period.
- c. Number of paid or public service announcements relating to conservation produced or sponsored during reporting period.
- d. Types of information relating to conservation provided to customers.
- e. Annual budget for public information programs directly related to conservation.

8. School Education Programs

Implementation

Implementation shall consist of at least the following actions:

- a. Implement a school education program to promote water conservation and water conservation related benefits.
- b. Programs shall include working with school districts and private schools in the water suppliers' service area to provide instructional assistance, educational materials, and classroom presentations that identify urban, agricultural, and environmental issues and conditions in the local watershed. Education materials shall meet the State education framework requirements and grade-appropriate materials shall be distributed to grade levels K-3, 4-6, 7-8, and high school.

Coverage Requirements

Agencies shall maintain an active school education program to educate students in the agency's service areas about water conservation and efficient water uses.

Requirements for Documenting BMP Implementation

- a. Number of school presentations made during reporting period.
- b. Number and type of curriculum materials developed and/or provided by water supplier, including confirmation that curriculum materials meet State education framework requirements and are grade-level appropriate.
- c. Number of students reached.
- d. Number of in-service presentations or teacher's workshops conducted during reporting period.
- e. Annual budget for school education programs related to conservation.

9. Conservation Programs for CII Accounts

Implementation

Implementation shall consist of at least the following actions:

BOTH (a) AND (b)

a. CII Accounts

Identify and rank CII accounts (or customers, if the agency chooses to aggregate accounts) according to water use. For purposes of this BMP, CII accounts are defined as follows:

1) Commercial Accounts: Any water use that provides or distributes a product or service, such as hotels, restaurants, office buildings, commercial businesses, or other places of commerce. These do not include multi-family residences, agricultural users, or customers that fall within the industrial or institutional classifications.

2) Industrial Accounts: Any water users that are primarily manufacturers or processors of materials as defined by the SIC code numbers 2000 through 3999.

3) Institutional Accounts: Any water-using establishment dedicated to public service. This includes schools, courts, churches, hospitals, and government facilities. All facilities serving these functions are to be considered institutions regardless of ownership.

b. 3-Year Interim CII ULFT Program

Implementation shall consist of at least the following actions:

1) A program to accelerate replacement of existing high-water-using toilets with ULFTs (1.6 gallons or less) in CII facilities.

2) Programs shall be at least as effective as facilitating toilet replacements over a 3-year implementation period, commencing July 1, 2001, sufficient to produce cumulative water savings over 10 years equal to 3 percent of total water savings potential, as defined by Exhibit 8.

3) Annual reporting to the CUWCC of all available information described in Section D, subsection (b) of this BMP. The CUWCC shall develop and provide agencies with a concise reporting form by March 31, 2001.

4) By July 1, 2004, a committee selected by the CUWCC Steering Committee (Steering Committee) shall complete for submittal to the Steering Committee, a written evaluation of the interim program, including an assessment of program designs, obstacles to implementation, program costs, estimated water savings, and cost effectiveness. By August 2004, the Steering Committee will reconvene to review the evaluation and recommend to the CUWCC Plenary the next course of action on BMP 9 targets for CII toilet replacement programs.

AND EITHER (c) OR (d)

c. CII Water-Use Survey and Customer Incentives Program

Implement a CII Water-Use Survey and Customer Incentives Program. Develop a customer targeting and marketing strategy to provide water-use surveys and customer incentives to CII accounts such that 10 percent of each CII sector's accounts are surveyed within 10 years of the date implementation is to commence. Directly contact (via letter, telephone, or personal visit) and offer water-use surveys and customer incentives to at least 10 percent of each CII sector on a repeating basis. Water-use surveys must include a site visit, an evaluation of all water-using apparatus and processes, and a customer report identifying recommended efficiency measures, their expected payback period and available agency incentives. Within 1 year of a

completed survey, follow-up via phone or site visit with customer regarding facility water use and water saving improvements. Track customer contacts, accounts (or customers) receiving surveys, follow-ups, and measures implemented. The method for crediting water-use surveys completed prior to the revision of this BMP is described in Section E.

d. CII Conservation Performance Targets

Achieve a water-use reduction in the CII sectors equaling or exceeding the CII conservation performance target. Implement programs to achieve annual water-use savings by CII accounts by an amount equal to 10 percent of the baseline use of CII accounts in the agency's service area over a 10-year period. The target amount of annual water-use reduction in CII accounts is a static value calculated from the baseline amount of annual use. Baseline use is defined as the use by CII accounts in 1997. Water purveyors may justify to the CUWCC the use of an alternative baseline year.

Coverage Requirements

a. 3-Year CII ULFT Program

CII ULFT program water savings equal to 3 percent of total water savings potential, as defined by Exhibit 8.

EITHER

b. CII Water-Use Survey and Customer Incentives Program

Ten percent of each of the CII sector's accounts to accept a water-use survey within 10 years of the date implementation is to commence. For the purposes of calculating coverage, 10 percent of CII accounts means the number of accounts equal to 10 percent of CII accounts in 1997 or the year the agency signed the MOU, whichever is later.

OR

c. CII Conservation Performance Targets

Reduce annual water use by CII accounts by an amount equal to 10 percent of the annual baseline water use within 10 years of the date implementation is to commence, including savings resulting from implementation of Section A (b)--CII ULFTs.

Requirements for Documenting BMP Implementation

a. CII Accounts

The number of accounts (or customers) and amount of water use within each of the CII sectors.

b. 3-Year Interim CII ULFT Replacement Program

1) Customer participant information, including retail water utility account, primary contact information, facility address, facility type, number of toilets being replaced, number of toilets in facility (if available), primary reasons for toilet replacement, and program participation (if available).

2) Number of CII ULFTs replaced or distributed by CII subsector by year.

3) Total program cost by year, including administration and overhead, labor (staff salaries and benefits), marketing, outside services, incentives, and implementation (agency installation, rebate, permitting, and remedial costs), and any required evaluation and reporting by the CUWCC. Costs for program development and program operation shall be reported separately.

4) Total program budget by year.

5) Program funding sources by year, including intra-agency funding mechanisms, inter-agency cost sharing, and State/Federal financial assistance sources.

6) Description of program design and implementation, such as types of incentives, marketing, advertising methods and levels, customer targeting methods, customer contact methods, use of outside services (e.g., consultants or community-based organizations), and participant tracking and follow up.

7) Description of program acceptance or resistance by customers, any obstacles to implementation, and other issues affecting program implementation or effectiveness.

8) General assessment of program effectiveness.

AND EITHER (c) OR (d)

c. CII Water-Use Survey and Customer Incentives Program

- 1) The number of CII accounts (or customers) offered water-use surveys during the reporting period.
- 2) The number of new water-use surveys completed during the reporting period.
- 3) The number of follow-ups completed during the reporting period.
- 4) The type and number of water saving recommendations implemented.
- 5) Agency's program budget and actual program expenditures.

d. CII Conservation Performance Target

The estimated reduction in annual water use for all CII accounts due to agency programs, interventions, and actions. Agencies must document how savings were realized and the method and calculations for estimating savings, including the savings resulting from agency-assisted CII ULFTs replacements under Section A(b).

10. Wholesale Agency Assistance Programs

Implementation

Implementation shall consist of at least the following actions:

Financial Support

- a. Wholesale water suppliers will provide financial incentives, or equivalent resources, as appropriate and beneficial, to their retail water agency customers to advance water conservation efforts and effectiveness.
- b. All BMPs implemented by retail water agency customers, which can be shown to be cost-effective in terms of avoided cost of water from the wholesaler's perspective, using the CUWCC cost-effectiveness analysis procedures, will be supported.

Technical Support

Wholesale water agencies shall provide conservation-related technical support and information to all retail agencies for whom they serve as a wholesale supplier. At a minimum this requires:

- c. Conducting or funding workshops addressing the following topics:
 - 1) The CUWCC procedures for calculating program savings, costs, and cost effectiveness.
 - 2) Retail agencies' BMP implementation reporting requirements.
 - 3) The technical, programmatic, strategic or other pertinent issues and developments associated with water conservation activities in each of the following areas: ULFT replacement; residential retrofits; CII surveys; residential and large turf irrigation; and conservation-related rates and pricing.
- d. Having the necessary staff or equivalent resources available to respond to retail agencies' technical and programmatic questions involving the CUWCC's BMPs and their associated reporting requirements.

Program Management

- e. When mutually agreeable and beneficial, the wholesaler may operate all or any part of the conservation-related activities which a given retail supplier is obligated to implement under the BMP's cost-effectiveness test. The inability or unwillingness of the wholesaler to perform this function, however, in no way relieves or reduces the retailer's obligation to fully satisfy the requirements of all BMPs which are judged cost effective from the retailer's perspective.

Water Shortage Allocations

- f. Wholesale agencies shall work in cooperation with their customers to identify and remove potential disincentives to long-term conservation created by water shortage allocation policies and to identify opportunities to encourage and reward cost-effective investments in long-term conservation shown to advance regional water supply reliability and sufficiency.

Coverage Requirements

- a. Cost-effectiveness assessments completed for each BMP the agency is

potentially obligated to support. The methodology used will conform to the CUWCC's standards and procedures, and the information reported will be sufficient to permit independent verification of the cost-effectiveness calculations and of any exemptions claimed on cost-effectiveness grounds.

b. Agency avoided cost per acre-foot of new water supplies. The methodology used will conform to the CUWCC's standards and procedures, and the information reported will be sufficient to permit independent verification of the avoided cost calculations.

c. The total monetary amount of financial incentives and equivalent resources provided to retail members to assist, or to otherwise support, the implementation of BMPs.

d. The total amount of verified water savings achieved by each wholesaler-assisted BMP.

Requirements for Documenting BMP Implementation

a. The total monetary amount of financial incentives and equivalent resources provided to retail members to assist, or to otherwise support, the implementation of BMPs, subtotaled by BMP.

b. The total amount of verified water savings achieved by each wholesaler-assisted BMP.

11. Conservation Pricing

Implementation

Implementation methods shall be at least as effective as eliminating non-conserving pricing and adopting conserving pricing. For signatories supplying both water and sewer service, this BMP applies to pricing of both water and sewer service. Signatories that supply water but not sewer service shall make good-faith efforts to work with sewer agencies so that those sewer agencies adopt conservation pricing for sewer service.

a. Non-conserving pricing provides no incentives to customers to reduce use. Such pricing is characterized by one or more of the following components: Rates in which the unit price decreases as the quantity used increases (declining block rates); rates that involve charging customers a fixed amount per billing cycle regardless of the quantity used; and pricing in which the typical bill is determined by high-fixed charges and low commodity charges.

b. Conservation pricing provides incentives to customers to reduce average or peak

use, or both. Such pricing includes: Rates designed to recover the cost of providing service; and billing for water and sewer service based on metered water use. Conservation pricing is also characterized by one or more of the following components: Rates in which the unit rate is constant regardless of the quantity used (uniform rates) or increases as the quantity used increases (increasing block rates); seasonal rates or excess-use surcharges to reduce peak demands during summer months; and rates based upon the long-run marginal cost or the cost of adding the next unit of capacity to the system.

c. Adoption of lifeline rates for low income customers will neither qualify nor disqualify a rate structure as meeting the requirements of this BMP.

CUWCC Rate Impact Study

Within 1 year of the adoption of this BMP revision, the CUWCC shall undertake a study to determine the relative effect of conservation rate structure influence on landscape and indoor water use. The study shall develop sample areas that incorporate varying rate structure environments (e.g., low, uniform commodity rates; high, uniform commodity rates; increasing block rates, etc.). As practical, the study shall utilize direct metering of customer end uses and shall control for weather, climate, land use patterns, income, and other factors affecting water-use patterns. If the study shows significant potential savings, as determined by a balanced committee of voting CUWCC representatives, a revised pricing BMP containing numeric targets or other appropriate standards shall be developed for a CUWCC vote.

Coverage Requirements

Agency shall maintain rate structure consistent with BMP 11's definition of conservation pricing.

Requirements for Documenting BMP Implementation

- a. Report annual revenue requirement by customer class for the reporting period.
- b. Report annual revenue derived from commodity charges by customer class for the reporting period.
- c. Report rate structure by customer class for water service and sewer service, if provided.

12. Conservation Coordinator

Implementation

Implementation shall consist of at least the following actions:

a. Designation of a water conservation coordinator and support staff (if necessary), whose duties shall include the following:

- 1) Coordination and oversight of conservation programs and BMP implementation.
- 2) Preparation and submittal of the CUWCC BMP Implementation Report.
- 3) Communication and promotion of water conservation issues to agency senior management; coordination of agency conservation programs with operations and planning staff; preparation of annual conservation budget; participation in the CUWCC, including regular attendance at CUWCC meetings; and preparation of the conservation elements of the agency's urban Plan.

b. Agencies jointly operating regional conservation programs are not expected to staff duplicative and redundant conservation coordinator positions.

Coverage Requirements

Agency shall staff and maintain the position of conservation coordinator and provide support staff as necessary.

Requirements for Documenting BMP Implementation

- a. Conservation coordinator name, staff position, and years on the job.
- b. Date conservation coordinator position created by agency.
- c. Number of conservation coordinator staff.
- d. Duties of conservation coordinator and staff.

13. Water Waste Prohibition

Implementation

Implementation methods shall be enacting and enforcing measures prohibiting gutter flooding, single pass cooling systems in new connections, non-recirculating systems in all new conveyer car wash and commercial laundry systems, and non-recycling decorative water fountains.

Signatories shall also support efforts to develop State law regarding exchange-type water softeners that would:

- a. Allow the sale of only more efficient, demand-initiated regenerating (DIR) models.
- b. Develop minimum appliance efficiency standards that
 - 1) Increase the regeneration efficiency standard to at least 3,350 grains of hardness removed per pound of common salt used.
 - 2) Implement an identified maximum number of gallons discharged per gallon of soft water produced.
- c. Allow local agencies, including municipalities and special districts, to set more stringent standards and/or to ban on-site regeneration of water softeners if it is demonstrated and found by the agency governing board that there is an adverse effect on the re-claimed water or ground-water supply.

Signatories shall also include water softener checks in home water audit programs and include information about DIR and exchange-type water softeners in their educational efforts to encourage replacement of less efficient timer models.

Coverage Requirements

Agency shall adopt water waste prohibitions consistent with the provisions for this BMP specified in Section A.

Requirements for Documenting BMP Implementation

Description of water waste prohibition ordinances enacted in service area.

14. Residential ULFT Replacement Programs

Implementation

Implementation shall consist of at least the following actions:

- a. Implementation of programs for replacing existing high-water-using toilets with ULFTs (1.6 gallons or less) in single-family and multi-family residences.
- b. Programs shall be at least as effective as requiring toilet replacement at time of resale; program effectiveness shall be determined using the methodology for calculating water savings in Exhibit 6.

After extensive review, on July 30 1992, the CUWCC adopted Exhibit 6, Assumptions and Methodology for Determining Estimates of Reliable Savings from the Installation of ULFT. Exhibit 6 provides a methodology for calculating the level of effort required to satisfy BMP 14.

Coverage Requirements

Water savings from residential ULFT replacement programs to equal or exceed water savings achievable through an ordinance requiring the replacement high-water-using toilets with ULFTs upon resale, and taking effect on the date implementation of this BMP was to commence and lasting 10 years.

Requirements for Documenting BMP Implementation

- a. The number of single-family residences and multi-family units in service area constructed prior to 1992.
- b. The average number of toilets per single-family residence; the average number of toilets per multi-family unit.
- c. The average persons per household for single-family residences; the average persons per household for multi-family residences.
- d. The housing resale rate for single-family residences in service area; the housing resale rate for multi-family residences in service area.
- e. The number of ULFT installations credited to the agency's replacement program, by year.
- f. Description of ULFT replacement program.

- g. Estimated cost per ULFT replacement.
- h. Estimated water savings per ULFT replacement.